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## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## REGION 4 SAM NUNN ATLANTA FEDERAL CENTER 61 FORSYTH STREET ATLANTA GEORGIA 30303-8960

September 27, 2010

Alice Stratton
Office of National Marine Sanctuaries
National Ocean Service
National Oceanic and Atmospheric Administration
1305 East West Highway
Silver Spring, MD 20910

SUBJECT:

NOAA Final Programmatic Environmental Impact Statement

(FPEIS) for Coral Restoration in the Florida Keys and Flower

Garden Banks National Marine Sanctuaries (FKNMS and FGBNMS)

CEQ # 20100317

Dear Ms. Stratton:

Pursuant to Section 309 of the Clean Air Act (CAA) and Section 102(2)(C) of the National Environmental Policy Act (NEPA), the U.S. Environmental Protection Agency (EPA) Region 4 has reviewed the Final Programmatic Environmental Impact Statement issued by the National Oceanic and Atmospheric Administration (NOAA) for the subject project. Under Section 309 of the CAA, EPA is responsible for reviewing and commenting on major federal actions significantly affecting the quality of the human environment.

The FPEIS addresses restoration of coral reefs damaged as a result of physical impact. In addition to the no-action alternative, several physical restoration technologies to stabilize and reconstruct the reef substrate and contour are addressed. Three biological restoration technologies are also considered that involve reattachment and transplantation of living coral in order to facilitate recovery. While several emerging technologies are addressed, NOAA is focusing on proven technology.

The document provides a general analysis of restoration techniques available for coral reef and coral community (hard bottom) restoration in two very different physical settings. The hard bottoms and coral reefs in the Florida Keys are in shallow waters and the reefs at Flower Garden Banks, offshore of Texas and Louisiana, start at approximately 65 feet deep. However, the communities are very similar and both are prone to anthropogenic injuries. Groundings are a main anthropogenic injury to Florida reefs, and the number reported annually is probably a small percentage of actual

groundings. Important impacts to reefs at Flower Garden Banks include anchor and cable damage. Regardless of the cause of the injuries, the suite of restoration options are the same for both locations. These two sanctuaries possess extremely important marine habitat worthy of substantial restoration effort where it has been damaged.

EPA agrees with the three alternatives selected with the caveat as described, that all alternatives will be considered on a case-by-case basis. Since the alternative technologies are not mutually exclusive, it is likely that more than one would be utilized at a damage site. While the document identifies anthropogenic reasons for the physical damage, EPA recommends that the restoration plan include cementing fragments of branching corals after tropical storms and hurricanes. Those fragments will not reattach and will be lost due to tumbling and scouring with wave action. As documented in the the FPEIS, recovery studies have shown that reattaching broken pieces of branching corals can benefit reef restoration from any kind of event.

We rate this document LO (Lack of Objections). We appreciate the opportunity to review the proposed action. Please contact Ken Clark of my staff at (404) 562-8282 if you have any questions or want to discuss our comments further.

Sincerely,

Heinz J. Mueller, Chief NEPA Program Office

Office of Policy and Management